```
=> s iron (3a) enriched (3a) yeast
       1222353 IRON
         12895 IRONS
       1223382 IRON
                 (IRON OR IRONS)
        158725 ENRICHED
             1 ENRICHEDS
        158726 ENRICHED
                 (ENRICHED OR ENRICHEDS)
        249700 YEAST
         38906 YEASTS
        260103 YEAST
                 (YEAST OR YEASTS)
L1          24 IRON (3A) ENRICHED (3A) YEAST

=> file zcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   2.99       3.22

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FILE COVERS 1907 - 18 Jan 2011  VOL 154 ISS 4
FILE LAST UPDATED: 17 Jan 2011  (20110117/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Oct 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Oct 2010

ZCAplus now includes complete International Patent Classification (IPC)
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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d ti 1-24
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y
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L1 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

TI Preparation of iron-enriched yeast with discarded brewer's yeast

L1 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Production of nutritional food from yeast extracts

L1 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochemical indices in weanling piglets

L1 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Research and application prospect of yeast enriching trace elements

L1 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Iron-enriched composition comprising iron-containing yeast

L1 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Statistical optimization of cultivation conditions of iron-enriched yeast

L1 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Research on screening of iron-enriched yeasts

L1 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses

L1 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Protective effects of selenium-enriched yeasts on mice with liver damage caused by iron overloading

L1 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Iron enriched yeast biomass - A promising mineral feed supplement

L1 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Application of calcium, iron and zinc enriched yeasts to bread

L1 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Breeding of a high-biomass, iron-enriched yeast strain and its fermentation conditions

L1 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Recovery of green color of browned plants and algae using mineral-enriched yeasts

L1 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Construction of a high-biomass, iron-enriched yeast strain and study on distribution of iron in the cells of Saccharomyces cerevisiae

L1 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Screening of high-iron nutrient yeast

L1 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Yeast cells as sources of essential microelements and vitamins B1 and B2

L1 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Bioavailability of iron-enriched spirulina

L1 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Development and application of dietary minerals. Heme iron and zinc-enriched baker's yeast

L1 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI The distribution of iron in iron-enriched cells of Saccharomyces cerevisiae

L1 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Zinc and iron bioavailability using zinc/iron-enriched bakers' yeast

L1 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Composition for pharmaceutical use and/or for nutritional supplementation in humans or animals

L1 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Yeast enriched with trace elements as a new type of trace element source

L1 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Evaluation of bioavailability of iron in iron-enriched yeast. I. Prophylactic assay in rats

L1 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
TI Experimental study on the absorption of iron in iron-enriched nutrient yeast

=> d ibib abs hitind 1-24
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L1 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2011:28086 HCAPLUS <<LOGINID::20110118>>
TITLE: Preparation of iron-enriched yeast with discarded brewer's yeast
AUTHOR(S): Zhang, Jing; Hu, Chunxia; Wang, Zhanyong; Su, Tingting; Zhang, Xuesong
CORPORATE SOURCE: School of Environmental and Biological Engineering, Liaoning University of Petroleum and Chemical Technology, Fushun, 113001, Peop. Rep. China
SOURCE: Shipin Keji (2010), 35(6), 144-147
CODEN: SKHEAB; ISSN: 1005-9989
PUBLISHER: Shipin Keji Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Iron-enriched yeast was prepared with discarded brewers yeast. The cultural conditions were optimized as follows: cultural temperature was 28 °C; the recruitment of Fe2+ was 120 mg/L in culture medium; 50 mL liquid culture medium was cased in 500 mL triangle, the inoculums of yeast was 50 g, the initial pH value was 4.5-5.0, and the cultural time was 12 h. Under the optimize conditions, iron content of iron-enriched yeast

was resp. 600 μg/g. Organic iron content is 80.3%. The blank and iron-enriched yeast were studied using IR spectra, and the difference of which was compared.
CC 17 (Food and Feed Chemistry)
ST iron enriched brewers yeast
IT INDEXING IN PROGRESS
IT Temperature effects, biological
(preparation of iron-enriched yeast with discarded brewer's yeast)

L1 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:777863 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 153:36288
TITLE: Production of nutritional food from yeast extracts
INVENTOR(S): Yu, Xuefeng; Li, Zhihong; Yu, Minghua; Yao, Juan; Zhang, Yan; Zhu, Yamin; Xia, Changhong
PATENT ASSIGNEE(S): Angel Yeast Co., Ltd, Peop. Rep. China
SOURCE: PCT Int. Appl., 28pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2010069191 | A1 | 20100624 | WO 2009-CN74142 | 20090923 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| CN 101756216 | A | 20100630 | CN 2008-10186666 | 20081216 |
| PRIORITY APPLN. INFO.: | | | CN 2008-10186666 A | 20081216 |

AB A method of production of nutritional food from yeast exts. is described. The nutritional yeast food contains yeast as its major raw material, and comprises milk powder, maltodextrin, lactose, plant grease powder, calcium carbonate, starch, white granulated sugar, and flavoring agent, essence, further comprises folic acid, vitamin B group, vitamin A, vitamin C, selenium-enriched yeast, zinc-enriched yeast, chromium-enriched yeast, iron-enriched yeast, microcryst. cellulose, dehydrated scallion flake, cocoa powder, fruit and vegetable powder, sesame, milk tea powder, soy milk powder, oat flake. The nutritional yeast food in the forms of powder, snowflake and tablet are obtained through various methods.
IPCI A23L0001-29 [I,A]; A23C0009-13 [I,A]
IPCR A23L0001-29 [I,C]; A23L0001-29 [I,A]; A23C0009-13 [I,C]; A23C0009-13 [I,A]
CC 17-14 (Food and Feed Chemistry)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:61710 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 153:357686
TITLE: Establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochemical indices in weanling piglets
AUTHOR(S): Xu, Zhenying; Chen, Daiwen; Yu, Bing
CORPORATE SOURCE: Institute of Animal Nutrition, Sichuan Agricultural University, Ya'an, 625014, Peop. Rep. China
SOURCE: Dongwu Yingyang Xuebao (2009), 21(6), 897-902
CODEN: DYXOAK; ISSN: 1006-267X
PUBLISHER: Zhongguo Xumu Shouyi Xuehui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB This study was to explore the establishment of model of iron deficiency in weanling piglet, and to observe the change of growth performance, blood biochem. indexes and the iron content of the organ after supplementation of iron-enriched yeast or ferrous sulfate. Thirty-five 21-day-old weanling D*L*Y piglets with an average weight of (5.57±>0.83) kg, were randomly allocated into 7 groups with 5 replicates (1 pig per replicate), and each piglet was fed in single cage. Piglets were fed with the basal diet included 22.43 mg/kg iron for 4 wk to consume reserving iron in body. After iron was exhausted, piglets in control group were fed with the basal diet continuously, and piglets in 6 trial groups were fed with the basal diet supplemented with 80, 120 and 180 mg/kg iron either from iron-enriched yeast or ferrous sulfate during trial period. The trial duration was 10 days after 28 days depletion period. The results showed that piglets' model of iron deficiency was successfully established after 28 days. When iron concentration was 120 mg/kg, ADG and ADFI of piglets were the highest in all groups. There were significant effects on interactions of iron sources and levels on ADG and F/G ($P<0.05$). There were no significant effects on interactions of iron sources and levels on blood routine and blood biochem. indexes ($P>0.05$). Both iron-enriched yeast and ferrous sulfate of 120 mg/kg iron concentration significantly increased iron content in the internal organs, including spleen, liver, kidney and heart compared with control group ($P<0.01$); while iron concentration in ferrous sulfate with 120 mg/kg iron group significantly higher than that in iron-enriched yeast group ($P<0.01$). ADG, ADFI, serum ferritin and transferrin in iron-enriched yeast group were higher than those in ferrous sulfate group. In conclusion, both iron-enriched yeast and ferrous sulfate could improve the state of iron deficiency, and effect of iron-enriched yeast was better than that of ferrous sulfate.
CC 18-1 (Animal Nutrition)
Section cross-reference(s): 13
IT Blood serum
Feeding experiment
Growth, animal
Nutrition, animal
Sus scrofa domestica
Swine
(establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochem. indexes in weanling piglets)
IT Ferritins
Transferrins
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical

study); BIOL (Biological study)
(establishment of model of iron deficiency and effects of iron -enriched yeast on growth and blood biochem. indexes in weanling piglets)
IT Yeast
(iron-enriched; establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochem. indexes in weanling piglets)
IT 7439-89-6, Iron, biological studies 7720-78-7, Ferrous sulfate
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(establishment of model of iron deficiency and effects of iron -enriched yeast on growth and blood biochem. indexes in weanling piglets)

L1 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:1479211 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 153:60595
TITLE: Research and application prospect of yeast enriching trace elements
AUTHOR(S): Guo, Xuena; Cui, Li; Wang, Zhaoyue; He, Xiuping; Zhang, Borun
CORPORATE SOURCE: Institute of Microbiology, Chinese Academy of Sciences, Beijing, 100101, Peop. Rep. China
SOURCE: Shipin Yu Fajiao Gongye (2009), 35(4), 124-127
CODEN: SPYYDO; ISSN: 0253-990X
PUBLISHER: Shipin Yu Fajiao Gongye
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Chinese
AB A review. Trace elements are necessary nutrients of organism. They are important to maintain the normal metabolism of organism. Yeast can transform inorg. trace elements into organic form. In addition the biol. utilization rates of trace elements are improved. Yeast contains abundant nutrient components, and it can be applied as feed additive to animal industry. In this paper, the biol. function, research and application prospect of several kinds of yeast enriching trace elements were reviewed, for example, selenium-enriched yeast, iron-enriched yeast, zinc-enriched yeast and chromium-enriched yeast.
CC 17-0 (Food and Feed Chemistry)

L1 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:828782 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 151:132266
TITLE: Iron-enriched composition comprising iron-containing yeast
INVENTOR(S): Yamaguchi, Fumihide; Takeda, Yasuhiko
PATENT ASSIGNEE(S): Japan Tobacco Inc., Japan
SOURCE: PCT Int. Appl., 34pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2009084122 | A1 | 20090709 | WO 2007-JP75431 | 20071228 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, | | | | |

CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.: WO 2007-JP75431 20071228
AB It is intended to provide a composition for increasing the iron concentration in the blood including yeast containing iron in an amount of 0.3 g or more per 100 g of dry yeast. The composition of the invention shows better iron absorption compared with hem iron or water-insol. inorg. iron which is equivalent in terms of amount of iron, and causes less stimulation to the stomach compared with iron sulfate (II) which is equivalent in terms of amount of iron. Therefore, it is suitable for the case of repeated administration, the case of administration on an empty stomach, or before during or after meals, and the case of administration to a subject for whom less stimulation to the stomach is desired. For example, iron-containing yeast (iron content 5.91 g/100 g) was prepared by culturing Saccharomyces cerevisiae FT-4 (BP-8081) in a culture medium containing iron sulfate.
IPCI A61K0033-26 [I,A]; A23L0001-30 [I,A]; A61K0036-06 [I,A]; A61P0003-00 [I,A]; C12N0001-16 [I,A]
IPCR A61K0033-26 [I,C]; A61K0033-26 [I,A]; A23L0001-30 [I,C]; A23L0001-30 [I,A]; A61K0036-06 [I,C]; A61K0036-06 [I,A]; A61P0003-00 [I,C]; A61P0003-00 [I,A]; C12N0001-16 [I,C]; C12N0001-16 [I,A]
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 18
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:746306 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 151:311687
TITLE: Statistical optimization of cultivation conditions of iron-enriched yeast
AUTHOR(S): Xie, Zhenjian; Jiao, Shirong; Liu, Xiaodong
CORPORATE SOURCE: School of Bioengineering, Xihua University, Chengdu, Sichuan Province, 610039, Peop. Rep. China
SOURCE: Shipin Yu Fajiao Gongye (2008), 34(7), 98-102
CODEN: SPYYDO; ISSN: 0253-990X
PUBLISHER: Shipin Yu Fajiao Gongye
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The Saccharomyces cerevisiae 9F was selected as the test strain, and then statistical experiment design was applied to optimize the fermentation process of iron-enriched yeast. Following the one-variable-a-time design, Plackett-Burman design was applied to study the content of total iron and key factors, such as temperature, shaking table revolution and the concentration of Fe2+ added to the culture medium. Then Box-Behnken design was then applied in order to use the response surface function. The optimum fermentation conditions to obtain a total iron content of

594.923 mg/L were culture temperature 30.16°C, shaking table revolution 198.50 r/min and the concentration of Fe2+ 1440.69 mg/L.
CC 16-7 (Fermentation and Bioindustrial Chemistry)
ST optimization iron enriched yeast fermn
IT Agitation (mechanical)
Biomass
Fermentation
Growth, microbial
Saccharomyces cerevisiae
Temperature effects, biological
(statistical optimization of cultivation conditions of iron-enriched yeast)
IT Optimization
(statistical; statistical optimization of cultivation conditions of iron-enriched yeast)
IT 15438-31-0, Iron 2+, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(statistical optimization of cultivation conditions of iron-enriched yeast)

L1 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:1408788 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 150:562108
TITLE: Research on screening of iron-enriched yeasts
AUTHOR(S): Jiao, Shirong; Zuo, Cheng; Zeng, Jun; Wang, Ling
CORPORATE SOURCE: College of Public Health, Sichuan University, Chengdu, Sichuan Province, 610041, Peop. Rep. China
SOURCE: Zhongguo Niangzao (2007), (11), 53-56
CODEN: ZHNIDA; ISSN: 0254-5071
PUBLISHER: Beijing Zhongniang Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The iron-enriched yeast strain 9F was obtained by primary screening, second screening and domesticating of 10 different Saccharomyces cerevisiae. The fermentation conditions of strain 9F were optimized as follows: 10° Bx wort, 8 g/L urea, 0.02 g/L KH2PO4, 1200 g/mL Fe2+, initial pH was natural, liquid medium volume was 50 mL/250 mL, fermentation temperature was 32° and fermentation time was 24 h. Under above conditions, the biomass, iron content and concentration rate of 9F reached 11.08 g/L, 32.56 mg/g yeast and 30.10%, resp. The growth pattern of 9F was investigated to reveal a kinetic relationship.
CC 16-7 (Fermentation and Bioindustrial Chemistry)
ST iron enriched yeast growth
IT Biomass
Growth, microbial
Temperature effects, biological
Yeast
pH
(research on screening of iron-enriched yeasts)
IT 57-13-6, Urea, biological studies 7439-89-6, Iron, biological studies 7778-77-0, Potassium dihydrogen phosphate 15438-31-0, Iron 2+, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(research on screening of iron-enriched yeasts)

L1 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:960041 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 150:281447
TITLE: Producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses
AUTHOR(S): He, Haiyan; Qin, Yongling; Li, Nan; Chen, Guiguang; Liang, Zhiqun
CORPORATE SOURCE: Department of Chemistry and Life Science, Hechi University, Yizhou, Guangxi Province, 546300, Peop. Rep. China
SOURCE: Shipin Gongye Keji (2007), 28(8), 105-108
CODEN: SGOKE6; ISSN: 1002-0306
PUBLISHER: Shipin Gongye Keji Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The iron-enriched yeast was produced by using sugar-cane molasses, after single factor and orthogonal design expts. The optimal combinations were as follow: the initial pH of culture medium was 5.0, the inoculating content was 8% and then cultured on the shake bed with 180 r/min at 28 degree for about 72 h. Under the optimized conditions ,the biomass was 13.46 g/L, iron content of the yeast cell was 7.97 mg/g, and the total iron content was 107.28 mg/L.
CC 16-7 (Fermentation and Bioindustrial Chemistry)
Section cross-reference(s): 10
IT Fermentation
Molasses
Temperature effects, biological
Yeast
pH
(producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses)
IT Optimization
(statistical; producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses)
IT 7439-89-6, Iron, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(producing and optimizing fermentation conditions of iron enriched yeast using sugar cane molasses)

L1 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1233850 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 148:354730
TITLE: Protective effects of selenium-enriched yeasts on mice with liver damage caused by iron overloading
AUTHOR(S): Zhu, Hang; He, Qiu-shi; Lu, Yang; Lei, Lei; Luo, Hai-ji
CORPORATE SOURCE: Department of Nutrition and Food Hygiene, Public Hygiene and Tropical Medicine School, Southern Medical University, Guangzhou, 510515, Peop. Rep. China
SOURCE: Redai Yixue Zazhi (2007), 7(8), 732-734
CODEN: RYZEAI; ISSN: 1672-3619
PUBLISHER: Guangdong Redai Yixue Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The objective is to examine the effects of selenium-enriched yeasts on lipid peroxidn. and liver cell apoptosis caused by iron overloading.

Liver damage was induced in mice by i.p. injection with dextran for 6 wk. The mice were then fed with various dosages of selenium-enriched yeasts. The levels of malondialdehyde (MDA), the activities of superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GSH-Px), and the extent of cell apoptosis were then determined Selenium-enriched yeasts 40 mg/(kg·d) was found to decrease the content of liver MDA, upregulate the activities of SOD, CAT and GSH-Px, and decrease apoptosis of the liver cells. High concns. of selenium-enriched yeasts 20 and 60 mg/(kg·d) were found to increase the content of MDA and decrease the activities of SOD, CAT and GSH-Px, and increase apoptosis of hepatocytes. Selenium-enriched yeasts may function as antioxidant and oxidant, depending on the concentration of the selenium-enriched yeasts.

CC 18-1 (Animal Nutrition)

ST iron liver damage selenium enriched yeast supplement

L1 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:121292 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 146:315513

TITLE: Iron enriched yeast biomass - A promising mineral feed supplement

AUTHOR(S): Pas, Maja; Piskur, Barbara; Sustaric, Matevz; Raspor, Peter

CORPORATE SOURCE: Food Science and Technology Department, Biotechnical Faculty, Chair of Biotechnology, University of Ljubljana, Ljubljana, 1111, Slovenia

SOURCE: Bioresource Technology (2007), 98(8), 1622-1628 CODEN: BIRTEB; ISSN: 0960-8524

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Yeast biomass enriched with iron could represent a new and safer solution for prevention from anemia development. Such an iron source is less toxic and has better absorbability in organisms. The purpose of our research was the determination of the most suitable iron source in the cultivation medium for the yeast Saccharomyces cerevisiae, regarding good growth and iron accumulation in cells. Iron(III) citrate, iron(III) chloride, iron(III) nitrate and Fe-EDTA complex were used. The uptake of the chosen iron compound, Fe(III) citrate, by the yeasts Candida intermedia and Kluyveromyces marxianus was also investigated. Different growth behavior of the three yeast strains in the presence of Fe(III) citrate was observed The highest amts. of accumulated iron in S. cerevisiae, C. intermedia and K. marxianus biomass were about 13, 20 and 34 mg Fe g-1 dry weight, resp. To optimize the accumulation of iron in K. marxianus and to characterize iron enriched yeast biomass, further expts. are needed.

CC 17-12 (Food and Feed Chemistry)

IT Biomass
Candida intermedia
Feed
Feed additives
Kluyveromyces marxianus
Saccharomyces cerevisiae
Yeast
(iron enriched yeast biomass - promising mineral feed supplement)

IT 3522-50-7, Iron(III) citrate 7439-89-6, Iron, biological studies 7705-08-0, Iron(III) chloride, biological studies

10421-48-4, Iron(III) nitrate 15275-07-7, Iron(III)-EDTA complex
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(iron enriched yeast biomass - promising mineral feed supplement)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:1269802 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 144:330162
TITLE: Application of calcium, iron and zinc enriched yeasts to bread
AUTHOR(S): Shi, Changbo; Yan, Xishuang
CORPORATE SOURCE: Harbin University of Commerce, Harbin, 150076, Peop. Rep. China
SOURCE: Shipin Gongye Keji (2005), 26(2), 78-79
CODEN: SGOKE6; ISSN: 1002-0306
PUBLISHER: Shipin Gongye Keji Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Contents of calcium, iron and zinc in Brewers' yeast (organic forms) were increased by adding certain amts. of calcium chloride, ferrous sulfate and zinc sulfate (inorg. forms) into yeast culture media. There was no significant difference in apparent digestibility between bread prepared by calcium enriched yeast and normal yeast (control), while the apparent digestibilities of bread prepared by iron and zinc enriched yeasts were markedly higher than that of the control group. The optimal amts. of calcium, iron and zinc enriched yeasts added into bread were 2.5%, 3% and 3%, resp., and the corresponding contents of mineral elements in bread were increased greatly.
CC 17-11 (Food and Feed Chemistry)
IT Bread
Digestibility
Fermentation
(application of calcium, iron and zinc enriched yeast for bread)
IT Brewers' yeast
(mineral elements enriched; application of calcium, iron and zinc enriched yeast for bread)
IT Yeast
(mineral elements-containing; application of calcium, iron and zinc enriched yeast for bread)
IT 7439-89-6, Iron, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(application of calcium, iron and zinc enriched yeast for bread)
IT 7720-78-7, Ferrous sulfate 7733-02-0, Zinc sulfate 10043-52-4, Calcium chloride, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(application of calcium, iron and zinc enriched yeast for bread)

L1 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:285961 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 144:50099
TITLE: Breeding of a high-biomass, iron-enriched yeast strain and its fermentation conditions
AUTHOR(S): Yuan, Yulan; Guo, Xuena; Zhang, Borun; Liu, Shigui
CORPORATE SOURCE: College of Life Sciences, Sichuan University, Chengdu, 610064, Peop. Rep. China
SOURCE: Gongye Weishengwu (2004), 34(4), 29-33
CODEN: GOWEEK; ISSN: 1001-6678
PUBLISHER: Quanguo Gongye Weishengwu Xinxi Zhongxin
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A high-biomass, iron-enriched yeast fusant strain ZYF-15 was obtained by primary screening from 402 different genera and species, second screening, isolation of haploid, DES mutagenesis and interspecies protoplasts fusion. Under the optimized fermentation conditions, the biomass and iron content of strain ZYF-15 reached 11.2g/L and 24.5 mg/g dry cells resp. The total iron content of the fusion strain was 2.6 and 1.9 times than that of parent strains ZY-46 (Saccharomyces cerevisiae) and ZY-173 (Saccharomyces kluyveri), resp.
CC 16-2 (Fermentation and Bioindustrial Chemistry)
Section cross-reference(s): 10
ST high biomass iron enriched yeast strain fermn
IT Fusion, biological
(protoplast; selection of a high-biomass, iron-enriched yeast strain and its fermentation conditions)
IT Fermentation
Genetic selection
Mutagenesis
Saccharomyces cerevisiae
Saccharomyces kluyveri
(selection of a high-biomass, iron-enriched yeast strain and its fermentation conditions)
IT 7439-89-6, Iron, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(selection of a high-biomass, iron-enriched yeast strain and its fermentation conditions)

L1 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:588000 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 141:122727
TITLE: Recovery of green color of browned plants and algae using mineral-enriched yeasts
INVENTOR(S): Tsuchida, Yoshiaki; Toyoguchi, Minoru
PATENT ASSIGNEE(S): Nabebayashi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2004201553 | A | 20040722 | JP 2002-373703 | 20021225 |
| PRIORITY APPLN. INFO.: | | | JP 2002-373703 | 20021225 |

AB Green plants, e.g. leaves for wrapping bean-jam cakes, edible wild plants, etc., and marine green algae, which are browned due to storage upon drying

or salting, are heated with mineral-enriched yeasts to recover the green color. Thus, salted nozawana (Brassica campestris rapifera) was desalted with running water, soaked in H2O containing mineral-enriched yeast, and heated at ≥50° for 30 min to become green.
IPCI A23L0001-272 [ICM,7]; A23L0001-27 [ICM,7,C*]; A23L0001-337 [ICS,7]
IPCR A23L0001-27 [I,C*]; A23L0001-272 [I,A]; A23L0001-337 [I,A]; A23L0001-337 [I,C*]
CC 17-10 (Food and Feed Chemistry)
IT 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(yeasts enriched with; recovery of green color of plants and algae browned due to dry storage or salting, by heating with mineral-enriched yeasts)

L1 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:110131 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 140:405515
TITLE: Construction of a high-biomass, iron-enriched yeast strain and study on distribution of iron in the cells of Saccharomyces cerevisiae
AUTHOR(S): Yuan, Yulan; Guo, Xuena; He, Xiuping; Zhang, Borun; Liu, Shigui
CORPORATE SOURCE: College of Life Science, Sichuan University, Chengdu, 610064, Peop. Rep. China
SOURCE: Biotechnology Letters (2004), 26(4), 311-315
CODEN: BILED3; ISSN: 0141-5492
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A high-biomass, iron-enriched Saccharomyces cerevisiae ZYF-15 was constructed by interspecies protoplast fusion. Under optimal fermentation condition, the biomass and iron content of the strain reached 11 g l-1 and 25 mg Fe g-1 dry cells, resp. About 96% of enriched iron is converted into organic iron, which is mainly in cell walls and vacuoles with some bound to DNA, RNA and protein.
CC 16-2 (Fermentation and Bioindustrial Chemistry)
Section cross-reference(s): 10, 17
IT Fermentation
Saccharomyces cerevisiae
(construction of high-biomass, iron-enriched yeast strain and study on distribution of iron in cells of Saccharomyces cerevisiae)
IT DNA
Proteins
RNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(construction of high-biomass, iron-enriched yeast strain and study on distribution of iron in cells of Saccharomyces cerevisiae)
IT Fusion, biological
(protoplast; construction of high-biomass, iron-enriched yeast strain and study on distribution of iron in cells of Saccharomyces cerevisiae)
IT 7720-78-7, Ferrous sulfate
RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process)
(construction of high-biomass, iron-enriched

yeast strain and study on distribution of iron in cells of Saccharomyces cerevisiae)
IT 7439-89-6, Iron, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(construction of high-biomass, iron-enriched yeast strain and study on distribution of iron in cells of Saccharomyces cerevisiae)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:64587 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 140:356262
TITLE: Screening of high-iron nutrient yeast
AUTHOR(S): Xue, Dong-hua; Lu, Jun; Jin, Hua
CORPORATE SOURCE: School of Biological Engineering, Changchun University of Technology, Changchun, 130012, Peop. Rep. China
SOURCE: Jilin Huagong Xueyuan Xuebao (2003), 20(4), 10-12
CODEN: JHXUFO; ISSN: 1007-2853
PUBLISHER: Jilin Huagong Xueyuan Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Yeast with concentrated iron and fine biomass has been selected as the test strain. It uses molasses as the raw material. Suitable amts. of inorg. iron and nutrient salt are added. After fermentation and culturing, the iron content of the yeast cell is 2,352 mg/kg, protein over 53.38%. The yield of the iron yeast is over 2.7%.
CC 17-14 (Food and Feed Chemistry)
ST iron enriched yeast molasse fermn

L1 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2003:48668 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 138:150039
TITLE: Yeast cells as sources of essential microelements and vitamins B1 and B2
AUTHOR(S): Varga, E.; Maraz, A.
CORPORATE SOURCE: Faculty of Pharmacy, University of Medicine and Pharmacy, Tg. Mures, 4300, Rom.
SOURCE: Acta Alimentaria (2002), 31(4), 393-405
CODEN: ACALDI; ISSN: 0139-3006
PUBLISHER: Akademiai Kiado
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Baker's yeast (Saccharomyces cerevisiae Sz1) enriched in chromium, iron, selenium or zinc was prepared by shaken cultivation and laboratory fermentation Determination of the cellular distribution of microelements indicated that a considerable portion (68-88%) was bound to the cell constituents; only a very little part was in the cytosol and vacuole. Enrichment of yeast cells with iron was accompanied by a considerable increase in vitamin B2 content. Ascorbic acid as an antioxidant decomposed very rapidly during storage, while tocopherol was quite stable. Selenium enrichment did not affect the inactivation of ascorbic acid, but it accelerated the decomposition of tocopherol.
CC 10-1 (Microbial, Algal, and Fungal Biochemistry)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:635839 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 138:204114
TITLE: Bioavailability of iron-enriched spirulina
AUTHOR(S): Yoshinari, Orie
CORPORATE SOURCE: Development Dept., Ryusendo Co., Ltd., Japan
SOURCE: Food Style 21 (2002), 6(8), 83-86
CODEN: FSTYFF; ISSN: 1343-9502
PUBLISHER: Shokuhin Kagaku Shinbunsha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review on iron-enriched spirulina having higher iron bioavailability than wheat, yeast, and beef, for use for iron supplementation in treatment of iron-deficient anemia, etc.
CC 18-0 (Animal Nutrition)
Section cross-reference(s): 17

L1 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:635835 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 138:204113
TITLE: Development and application of dietary minerals. Heme iron and zinc-enriched baker's yeast
AUTHOR(S): Fukami, Katsuya
CORPORATE SOURCE: Japan Tobacco Inc., Japan
SOURCE: Food Style 21 (2002), 6(8), 69-72
CODEN: FSTYFF; ISSN: 1343-9502
PUBLISHER: Shokuhin Kagaku Shinbunsha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review covering characteristics of heme iron obtained by ultrafiltration from animal blood, and zinc-enriched yeast as food materials for supplementation of minerals.
CC 18-0 (Animal Nutrition)
Section cross-reference(s): 17
ST review heme iron zinc enriched yeast food material
IT Food additives
Yeast
(characteristics of heme iron and zinc-enriched yeast as food material)
IT Mineral elements, biological studies
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(characteristics of heme iron and zinc-enriched yeast as food material)
IT 7439-89-6, Iron, biological studies 7440-66-6, Zinc, biological studies 14875-96-8, Heme
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(characteristics of heme iron and zinc-enriched yeast as food material)

L1 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:147276 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 136:213324

TITLE: The distribution of iron in iron-enriched cells of Saccharomyces cerevisiae
AUTHOR(S): Gaudreau, H.; Tompkins, T. A.; Champagne, C. P.
CORPORATE SOURCE: Food Research and Development Center, Agriculture and Agri-Food Canada, Saint-Hyacinthe, QC, J2S 8E3, Can.
SOURCE: Acta Alimentaria (2001), 30(4), 355-361
CODEN: ACALDI; ISSN: 0139-3006
PUBLISHER: Akademiai Kiado
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fresh or freeze-dried iron-enriched bakers' yeast (5% of total solids composed of iron) were fractionated, and the distribution of iron was examined After centrifugation of fresh yeast creams, 89% of total iron was found in the supernatant, which contained only 23% of the total solids. Results suggest that only 13% of the iron is bound to cells in the fresh yeast suspension. Most of the cell-located iron was found on the cell wall, whereas the cytoplasm contained proportionally (iron content of total solids) almost 3 times less iron than the cell walls. Freeze-drying of the iron-enriched yeast had marked effects on the distribution of total solids and iron (in the fractionation procedures that were carried out following their rehydration). The freeze-drying process induced binding of free iron to the yeast cell wall, and twice as much iron was thus found on freeze-dried cells. In the freeze-dried product, it was estimated that 27% of iron was bound to cell fractions.
CC 10-1 (Microbial, Algal, and Fungal Biochemistry)
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2000:136833 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 133:30080
TITLE: Zinc and iron bioavailability using zinc/iron -enriched bakers' yeast
AUTHOR(S): Tsujimura, Masaru; Higasa, Shizu; Shimada, Shoji
CORPORATE SOURCE: Laboratory of Bio-Organic Chemistry, Kagawa Nutrition University, Japan
SOURCE: Joshi Eiyo Daigaku Kiyo (1999), 30, 159-165
CODEN: JEDKD7; ISSN: 0286-0511
PUBLISHER: Kagawa Eiyo Gakuen
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Zinc and iron bioavailability using zinc and iron fortified bakers' yeast was studied in the Fischer male rats by observing their general growth, mineral levels in serum, liver, brain, and kidney (zinc-enriched bakers' yeast food only). Feed composition of test groups were as follows. (1) Control food group (C group): fed unmodified AIN-93G feed. (2) The zinc yeast test food group (zinc group) and (3) the iron yeast test food group (iron group): fed feed in which all zinc or iron contained in C group food was replaced with a yeast derivative (4) One-half zinc yeast food group (1/2 zinc group) and (5) one-half iron yeast food group (1/2 iron group): fed feed in which one-half of the zinc or iron of C group food was replaced with a yeast derivative and the remaining one-half by a standard mineral mixture
Granulated yeast was added to maintain yeast count at the same level in the feed for zinc and iron groups. (6) The mineral-zinc food group (m-zinc group) and (7) the mineral-iron food group (m-iron group): fed C group

food supplemented with the granulated yeast to maintain yeast count at the same level as in the zinc and iron groups. Dried yeast (Saccharomyces cerevisiae) specially produced by Oriental Yeast Co., Ltd. and high zinc content yeast (2,300 mg/100 g) or high iron contest yeast (1,520 mg/100 g) were used as sources of minerals for feed preparation Zinc and iron content (in mg/100 mg) in each feed was as follows: for C group (zinc: 3.88, iron: 4.15), zinc group (zinc: 3.69, iron: 4.07), Iron group (zinc: 4.21, iron: 4.09), 1/2 zinc group (zinc: 3.80, iron: 4.14), 1/2 iron group (zinc: 4.01, iron: 3.95), m-zinc group (zinc: 4.01, iron: 4.08), m-iron group (zinc: 4.04, iron: 3.94). Growth observation data and test results are summarized as below. (1) No significant differences in body-weight gain, feed intake, and weight gain per feed consumed in grams were noted for zinc-/iron-enriched feed groups using bakers' yeast as the mineral source and the plain mineral feed mix. (2) No significant differences in serum zinc or iron levels were observed in the tested groups. (3) Significant differences in liver and brain zinc/iron were observed in some test groups, but none were due to the intake of mineral-enriched bakers' yeast. (4) In the zinc-enriched bakers yeast test, zinc and iron were present at significantly high levels in the kidneys of groups fed mineral-enriched bakers' yeast.

CC 18-1 (Animal Nutrition)
Section cross-reference(s): 17

ST zinc iron enriched yeast bioavailability

IT Bakers' yeast
Brain
Kidney
Liver
Saccharomyces cerevisiae
(zinc and iron bioavailability using zinc/iron-enriched bakers' yeast)

IT Mineral elements, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(zinc and iron bioavailability using zinc/iron-enriched bakers' yeast in relation to)

IT 7439-89-6, Iron, biological studies 7440-66-6, Zinc, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(zinc and iron bioavailability using zinc/iron-enriched bakers' yeast)

IT 7439-95-4, Magnesium, biological studies 7440-09-7, Potassium, biological studies 7440-23-5, Sodium, biological studies 7440-50-8, Copper, biological studies 7440-70-2, Calcium, biological studies 7723-14-0, Phosphorus, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(zinc and iron bioavailability using zinc/iron-enriched bakers' yeast in relation to)

L1 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1999:579658 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 131:204635
TITLE: Composition for pharmaceutical use and/or for nutritional supplementation in humans or animals
INVENTOR(S): Drewski, Andrea; Mauren, Leo; Siegmund, Martin; Wendt, Sylke

PATENT ASSIGNEE(S): Dr. Schieffer Arzneimittel G.m.b.H., Germany
SOURCE: Ger., 12 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 19812753 | C1 | 19990909 | DE 1998-19812753 | 19980323 |
| WO 9948506 | A2 | 19990930 | WO 1999-DE732 | 19990316 |
| W: AU, BR, CA, CN, ID, JP, KR, MX, PL, SG, TR, US, VN, ZA | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9936995 | A | 19991018 | AU 1999-36995 | 19990316 |

PRIORITY APPLN. INFO.: DE 1998-19812753 A 19980323
WO 1999-DE732 W 19990316

AB An oral composition containing a pharmaceutical or food supplement (e.g. a vitamin or provitamin) as active agent, embedded in a matrix for sustained release of the active agent at a reproducible rate, includes a metal-enriched yeast (particle size <60 mesh) to regulate the release rate of the active agent. The metal-enriched yeast can also correct deficiencies in the corresponding trace metal, as well as deficiencies in B vitamins in which the yeast is also rich. Thus, tablets were prepared containing ascorbic acid 236.25, 5% Zn yeast 300, lactose 42.14, hydroxypropylmethylcellulose (matrix) 146.9, PVP 23, stearic acid 15.6, talc 8.66, fumed silica 4.33, and Mg stearate 3.12 mg.

IPCI A61K0035-72 [ICM,6]; A61K0009-22 [ICS,6]; A61K0009-52 [ICS,6]; A23L0001-29 [ICS,6]; A23K0001-16 [ICS,6]
IPCR A23K0001-00 [I,C*]; A23K0001-00 [I,A]; A23K0001-16 [I,C*]; A23K0001-16 [I,A]; A23K0001-175 [I,C*]; A23K0001-175 [I,A]; A23L0001-28 [I,C*]; A23L0001-28 [I,A]; A23L0001-30 [I,C*]; A23L0001-30 [I,A]; A23L0001-304 [I,C*]; A23L0001-304 [I,A]; A61K0009-22 [I,C*]; A61K0009-22 [I,A]; A61K0009-52 [I,C*]; A61K0009-52 [I,A]; A61K0035-00 [I,C*]; A61K0035-00 [I,A]
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 17
IT 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-62-2, Vanadium, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7782-49-2, Selenium, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(yeast enriched with; metal-yeast-containing composition for pharmaceutical use or for nutritional supplementation in humans or animals)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1998:113535 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 128:204209

ORIGINAL REFERENCE NO.: 128:40387a,40390a
TITLE: Yeast enriched with trace elements as a new type of trace element source
AUTHOR(S): Hegoczki, Jozsef; Suhajda, Agnes; Janzso, Bela; Vereczkey, Gabor
CORPORATE SOURCE: Hung.
SOURCE: Elelmezesi Ipar (1997), 51(11), 339-341
CODEN: EMIPAB; ISSN: 0013-5909
PUBLISHER: METE
DOCUMENT TYPE: Journal
LANGUAGE: Hungarian
AB The highest enrichment was achieved when yeast was exposed to trace elements in the stationary phase. Fe, Ti and Se were 91-99% incorporated this way. Enriched yeast is a trace element source for feed and food.
CC 17-14 (Food and Feed Chemistry)
IT 7439-89-6, Iron, biological studies 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-32-6, Titanium, biological studies 7440-48-4, Cobalt, biological studies 7440-50-8, Copper, biological studies 7782-49-2, Selenium, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(yeast enriched with trace elements as a trace element source in food and feed)

L1 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1990:476787 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 113:76787
ORIGINAL REFERENCE NO.: 113:12989a,12992a
TITLE: Evaluation of bioavailability of iron in iron-enriched yeast. I. Prophylactic assay in rats
AUTHOR(S): Weng, Congying; Liu, Qipei; Xu, Dadao
CORPORATE SOURCE: Dep. Nutr. Food Hyg., Shanghai Med. Univ., Shanghai, Peop. Rep. China
SOURCE: Yingyang Xuebao (1989), 11(4), 311-18
CODEN: YYHPA4; ISSN: 0512-7955
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB A prophylactic assay was made to determine the bioavailability of Fe from Fe-enriched yeast fed to weanling Wister rats. The Hb concentration was determined after 3 wk. A slope-ratio assay was used to calculate the relative biol. value (RBV) of the yeast Fe. The RBV of the yeast Fe was slightly higher than that of FeSO4 (RBV ranged from 104.27% to 110.00%). The high bioavailability of the yeast Fe may be related to certain amino acids and vitamin B2 contained in the yeast. Adding unfortified yeast to the diet was helpful for maintaining Hb concentration during the rapid growth period of rats, but there were no statistically significant differences. It is valid to use this nutritive yeast as a vehicle for Fe supplementation.
CC 17-6 (Food and Feed Chemistry)
Section cross-reference(s): 18
IT Yeast
(iron bioavailability in iron-enriched)
IT 7439-89-6, Iron, biological studies
RL: BIOL (Biological study)
(bioavailability of, in iron-enriched yeast)

L1 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1985:436515 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 103:36515
ORIGINAL REFERENCE NO.: 103:5915a,5918a
TITLE: Experimental study on the absorption of iron in iron-enriched nutrient yeast
AUTHOR(S): Ma, Shumin; Wang, Baogui; Hou, Yan; Zhang, Yajie; Yu, Liping
CORPORATE SOURCE: Dep. Health, Bethune Med. Coll., Changchun, Peop. Rep. China
SOURCE: Yingyang Xuebao (1985), 7(1), 25-8
CODEN: YYHPA4; ISSN: 0512-7955
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB 59Fe-enriched yeast were given to rats by stomach tube. Rats of the control groups were given the radioactive 59Fe together with ordinary yeast plus FeSO4 or FeSO4 only. The absorption of Fe was calculated by the difference between intake and fecal loss. The absorption of Fe in 59Fe-enriched yeast (38.7%) was similar to that of FeSO4 (38.3%). This indicates that the Fe incorporated into yeast is easily absorbed and can be used in Fe supplementation of foods.
CC 18-1 (Animal Nutrition)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

=> log h

(FILE 'HOME' ENTERED AT 20:34:41 ON 18 JAN 2011)

FILE 'HCAPLUS' ENTERED AT 20:35:08 ON 18 JAN 2011
L1 24 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON IRON (3A) ENRICHED (3A) YEAST

FILE 'ZCAPLUS' ENTERED AT 20:35:43 ON 18 JAN 2011

FILE 'HCAPLUS' ENTERED AT 20:35:48 ON 18 JAN 2011
D TI 1-24

FILE 'ZCAPLUS' ENTERED AT 20:35:49 ON 18 JAN 2011

FILE 'HCAPLUS' ENTERED AT 20:37:23 ON 18 JAN 2011
D IBIB ABS HITIND 1-24

L3 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:286774 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 152:415191
TITLE: Hypoglycemic health foods containing zinc-enriched yeast, selenium-enriched yeast or chromium-enriched yeast, Chinese medicinal extracts and vitamins
INVENTOR(S): Yu, Xuefeng; Li, Zhihong; Yu, Minghua; Yao, Juan; Zhang, Yan; Zhang, Haibo; Xia, Changhong; Zhu, Yamin
PATENT ASSIGNEE(S): Angel Yeast Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| CN 101658537 | A | 20100303 | CN 2008-10210569 | 20080827 |
| PRIORITY APPLN. INFO.: | | | CN 2008-10210569 | 20080827 |

L3 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:61710 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 153:357686
TITLE: Establishment of model of iron deficiency and effects of iron-enriched yeast on growth and blood biochemical indices in weanling piglets
AUTHOR(S): Xu, Zhenying; Chen, Daiwen; Yu, Bing
CORPORATE SOURCE: Institute of Animal Nutrition, Sichuan Agricultural University, Ya'an, 625014, Peop. Rep. China
SOURCE: Dongwu Yingyang Xuebao (2009), 21(6), 897-902
CODEN: DYXOAK; ISSN: 1006-267X
PUBLISHER: Zhongguo Xumu Shouyi Xuehui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:836368 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 151:335910
TITLE: Effects of copper-enriched yeast on nutrient digestibility and serum physics-chemical parameters in simmental steer
AUTHOR(S): Liu, Qiang; Wang, Cong; Dong, Kuanhu; Zhao, Xiang; Gao, Wenjun
CORPORATE SOURCE: College of Animal Science and Technology, Shanxi Agricultural University, Taigu, Shanxi Province, 030801, Peop. Rep. China
SOURCE: Jiguang Shengwu Xuebao (2008), 17(4), 502-508
CODEN: JSXUFX; ISSN: 1007-7146
PUBLISHER: Jiguang Shengwu Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:1408788 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 150:562108
TITLE: Research on screening of iron-enriched yeasts
AUTHOR(S): Jiao, Shirong; Zuo, Cheng; Zeng, Jun; Wang, Ling
CORPORATE SOURCE: College of Public Health, Sichuan University, Chengdu, Sichuan Province, 610041, Peop. Rep. China
SOURCE: Zhongguo Niangzao (2007), (11), 53-56
CODEN: ZHNIDA; ISSN: 0254-5071
PUBLISHER: Beijing Zhongniang Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:490194 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 148:494066
TITLE: Development and characteristics of zinc-enriched bakers' yeast
AUTHOR(S): Suzuki, Keizo; Kanzaki, Ken; Oka, Osamu; Matuo, Yuhsi
CORPORATE SOURCE: Oriental Yeast Co. (OYC), Japan

SOURCE: Seibutsu Shiryo Bunseki (2008), 31(2), 139-146
CODEN: SSBUEL; ISSN: 0913-3763
PUBLISHER: Seibutsu Shiryo Bunseki Kagakkai
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

L3 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:235168 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 148:329582
TITLE: Method for manufacturing mineral-enriched yeast
INVENTOR(S): Moon, Gi Hyeok; Yoon, Jeong Won
PATENT ASSIGNEE(S): S. Korea
SOURCE: Repub. Korea, 7pp.
CODEN: KRXXFC
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| KR 797378 | B1 | 20080122 | KR 2006-95347 | 20060929 |

PRIORITY APPLN. INFO.: KR 2006-95347 20060929

L3 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1233850 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 148:354730
TITLE: Protective effects of selenium-enriched yeasts on mice with liver damage caused by iron overloading
AUTHOR(S): Zhu, Hang; He, Qiu-shi; Lu, Yang; Lei, Lei; Luo, Hai-ji
CORPORATE SOURCE: Department of Nutrition and Food Hygiene, Public Hygiene and Tropical Medicine School, Southern Medical University, Guangzhou, 510515, Peop. Rep. China
SOURCE: Redai Yixue Zazhi (2007), 7(8), 732-734
CODEN: RYZEAI; ISSN: 1672-3619
PUBLISHER: Guangdong Redai Yixue Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:121292 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 146:315513
TITLE: Iron enriched yeast biomass - A promising mineral feed supplement
AUTHOR(S): Pas, Maja; Piskur, Barbara; Sustaric, Matevz; Raspor, Peter
CORPORATE SOURCE: Food Science and Technology Department, Biotechnical Faculty, Chair of Biotechnology, University of Ljubljana, Ljubljana, 1111, Slovenia
SOURCE: Bioresource Technology (2007), 98(8), 1622-1628
CODEN: BIRTEB; ISSN: 0960-8524
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:1269802 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 144:330162
TITLE: Application of calcium, iron and zinc enriched yeasts to bread
AUTHOR(S): Shi, Changbo; Yan, Xishuang
CORPORATE SOURCE: Harbin University of Commerce, Harbin, 150076, Peop. Rep. China
SOURCE: Shipin Gongye Keji (2005), 26(2), 78-79
CODEN: SGOKE6; ISSN: 1002-0306
PUBLISHER: Shipin Gongye Keji Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:285961 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 144:50099
TITLE: Breeding of a high-biomass, iron-enriched yeast strain and its fermentation conditions
AUTHOR(S): Yuan, Yulan; Guo, Xuena; Zhang, Borun; Liu, Shigui
CORPORATE SOURCE: College of Life Sciences, Sichuan University, Chengdu, 610064, Peop. Rep. China
SOURCE: Gongye Weishengwu (2004), 34(4), 29-33
CODEN: GOWEEK; ISSN: 1001-6678
PUBLISHER: Quanguo Gongye Weishengwu Xinxi Zhongxin
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:588000 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 141:122727
TITLE: Recovery of green color of browned plants and algae using mineral-enriched yeasts
INVENTOR(S): Tsuchida, Yoshiaki; Toyoguchi, Minoru
PATENT ASSIGNEE(S): Nabebayashi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2004201553 | A | 20040722 | JP 2002-373703 | 20021225 |
| PRIORITY APPLN. INFO.: | | | JP 2002-373703 | 20021225 |

L3 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:110131 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 140:405515
TITLE: Construction of a high-biomass, iron-enriched yeast strain and study on distribution of iron in the cells of Saccharomyces cerevisiae
AUTHOR(S): Yuan, Yulan; Guo, Xuena; He, Xiuping; Zhang, Borun; Liu, Shigui
CORPORATE SOURCE: College of Life Science, Sichuan University, Chengdu, 610064, Peop. Rep. China

SOURCE: Biotechnology Letters (2004), 26(4), 311-315
CODEN: BILED3; ISSN: 0141-5492
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2003:9965 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 138:38548
TITLE: Mineral-enriched yeast food preparation
INVENTOR(S): Ueto, Takamitsu
PATENT ASSIGNEE(S): Fancl Corporation, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003000198 | A | 20030107 | JP 2001-185019 | 20010619 |
| JP 3467028 | B2 | 20031117 | | |
| JP 2003061618 | A | 20030304 | JP 2002-234356 | 20010619 |
| PRIORITY APPLN. INFO.: | | | JP 2001-185019 | A3 20010619 |

L3 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:635835 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 138:204113
TITLE: Development and application of dietary minerals. Heme iron and zinc-enriched baker's yeast
AUTHOR(S): Fukami, Katsuya
CORPORATE SOURCE: Japan Tobacco Inc., Japan
SOURCE: Food Style 21 (2002), 6(8), 69-72
CODEN: FSTYFF; ISSN: 1343-9502
PUBLISHER: Shokuhin Kagaku Shinbunsha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

L3 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2000:136833 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 133:30080
TITLE: Zinc and iron bioavailability using zinc/iron-enriched bakers' yeast
AUTHOR(S): Tsujimura, Masaru; Higasa, Shizu; Shimada, Shoji
CORPORATE SOURCE: Laboratory of Bio-Organic Chemistry, Kagawa Nutrition University, Japan
SOURCE: Joshi Eiyo Daigaku Kiyo (1999), 30, 159-165
CODEN: JEDKD7; ISSN: 0286-0511
PUBLISHER: Kagawa Eiyo Gakuen
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

L3 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2000:37661 HCAPLUS <<LOGINID::20110118>>

DOCUMENT NUMBER: 132:77861
TITLE: Mineral-enriched soybean curd and its manufacture
INVENTOR(S): Nakagawa, Katsue
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2000014351 | A | 20000118 | JP 1998-202828 | 19980703 |

PRIORITY APPLN. INFO.: JP 1998-202828 19980703

L3 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1999:579658 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 131:204635
TITLE: Composition for pharmaceutical use and/or for nutritional supplementation in humans or animals
INVENTOR(S): Drewski, Andrea; Mauren, Leo; Siegmund, Martin; Wendt, Sylke
PATENT ASSIGNEE(S): Dr. Schieffer Arzneimittel G.m.b.H., Germany
SOURCE: Ger., 12 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 19812753 | C1 | 19990909 | DE 1998-19812753 | 19980323 |
| WO 9948506 | A2 | 19990930 | WO 1999-DE732 | 19990316 |
| W: AU, BR, CA, CN, ID, JP, KR, MX, PL, SG, TR, US, VN, ZA | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| AU 9936995 | A | 19991018 | AU 1999-36995 | 19990316 |

PRIORITY APPLN. INFO.: DE 1998-19812753 A 19980323
WO 1999-DE732 W 19990316
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1998:113535 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 128:204209
ORIGINAL REFERENCE NO.: 128:40387a,40390a
TITLE: Yeast enriched with trace elements as a new type of trace element source
AUTHOR(S): Hegoczki, Jozsef; Suhajda, Agnes; Janzso, Bela; Vereczkey, Gabor
CORPORATE SOURCE: Hung.
SOURCE: Elelmezesi Ipar (1997), 51(11), 339-341
CODEN: EMIPAB; ISSN: 0013-5909
PUBLISHER: METE
DOCUMENT TYPE: Journal

LANGUAGE: Hungarian

L3 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1997:202598 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 126:237738
ORIGINAL REFERENCE NO.: 126:45993a,45996a
TITLE: Effects of selenium-enriched yeast on microelement content in rat tissues
AUTHOR(S): Djujic, Ivana; Mandic, M.; Jozanov-Stankov, Olga; Demajo, M.; Vrvic, M. M.
CORPORATE SOURCE: Center of Chemistry, Institute of Chemistry, Technology and Metallurgy, Belgrade, 11000, Yugoslavia
SOURCE: Naucni Skupovi - Srpska Akademija Nauka i Umetnosti, Odeljenje Prirodno-Matematickih Nauka (1995), 6(Conference on Selenium, 1993), 105-113
CODEN: NSSNFV
PUBLISHER: Srpska Akademija Nauka i Umetnosti
DOCUMENT TYPE: Journal
LANGUAGE: English
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L3 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1990:476787 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 113:76787
ORIGINAL REFERENCE NO.: 113:12989a,12992a
TITLE: Evaluation of bioavailability of iron in iron-enriched yeast. I. Prophylactic assay in rats
AUTHOR(S): Weng, Congying; Liu, Qipei; Xu, Dadao
CORPORATE SOURCE: Dep. Nutr. Food Hyg., Shanghai Med. Univ., Shanghai, Peop. Rep. China
SOURCE: Yingyang Xuebao (1989), 11(4), 311-18
CODEN: YYHPA4; ISSN: 0512-7955
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

L3 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1985:436515 HCAPLUS <<LOGINID::20110118>>
DOCUMENT NUMBER: 103:36515
ORIGINAL REFERENCE NO.: 103:5915a,5918a
TITLE: Experimental study on the absorption of iron in iron-enriched nutrient yeast
AUTHOR(S): Ma, Shumin; Wang, Baogui; Hou, Yan; Zhang, Yajie; Yu, Liping
CORPORATE SOURCE: Dep. Health, Bethune Med. Coll., Changchun, Peop. Rep. China
SOURCE: Yingyang Xuebao (1985), 7(1), 25-8
CODEN: YYHPA4; ISSN: 0512-7955
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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     FILE 'HCAPLUS' ENTERED AT 20:35:08 ON 18 JAN 2011
L1           24 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  IRON (3A) ENRICHED
                (3A) YEAST

     FILE 'ZCAPLUS' ENTERED AT 20:35:43 ON 18 JAN 2011

     FILE 'HCAPLUS' ENTERED AT 20:35:48 ON 18 JAN 2011
                D TI 1-24

     FILE 'ZCAPLUS' ENTERED AT 20:35:49 ON 18 JAN 2011

     FILE 'HCAPLUS' ENTERED AT 20:37:23 ON 18 JAN 2011
                D IBIB ABS HITIND 1-24

     FILE 'ZCAPLUS' ENTERED AT 20:37:26 ON 18 JAN 2011

     FILE 'HCAPLUS' ENTERED AT 20:54:06 ON 18 JAN 2011
                E (EVALUATION (5A) BIOAVAILABILITY (5A) IRON (5A) YEAST)/TI
L2            1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  EVALUATION (5A)
                BIOAVAILABILITY (5A) IRON (5A) YEAST
                D IBIB
                D ABS
L3           21 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  STUDY (5A) IRON (5A)
                ENRICHED (5A) YEAST

     FILE 'ZCAPLUS' ENTERED AT 20:56:44 ON 18 JAN 2011

     FILE 'HCAPLUS' ENTERED AT 20:56:59 ON 18 JAN 2011
                D IBIB 1-21

     FILE 'ZCAPLUS' ENTERED AT 20:57:01 ON 18 JAN 2011
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